

SpeedMarking-Laser

User's Manual

Foreword

Revisions

Version	Date	Modification
0.0	05/07	First release

Range of delivery

Please check to ensure that your SpeedMarking-Laser is complete. Your SpeedMarking-Laser should contain the following parts.

- Special packing SpeedMarking-Laser
- SpeedMarking-Laser
- Toner
- Parallel printer cable
- Power cord
- User's Manual
- CD with software and driver

Installation instructions

This manual contains important information for installing and initial start-up procedures for the SpeedMarking-Laser.

You can find here information about the installation, setup and remedy of defects of the SpeedMarking-Laser.

For more information, useful tips, or the latest drivers, check our homepage at:

www.weidmueller.com

Follow the Downloads → Printer Drivers → Speed Marking Laser links.

You can also send us an e-mail at info@weidmueller.com.

Contact address



Weidmüller Interface GmbH & Co. KG
Postfach 3030
32720 Detmold
Klingenbergstraße 16
32758 Detmold, Germany
Phone +49 (0) 5231 14-0
Fax +49 (0) 5231 14-2083
E-Mail info@weidmueller.com
Internet www.weidmueller.com

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1. Safety instructions



Read the following instructions carefully before starting up the SpeedMarking-Laser. Observe the warnings and notices on the SpeedMarking-Laser at all times.



- The mains voltage must correspond to the system voltage given on the SpeedMarking-Laser type plate.
- Connect the device to a properly earthed and fused socket outlet only. Do not use a socket outlet already being used by devices that are turned on and off at regular intervals, such as photocopiers or ventilators.
- Do not connect the SpeedMarking-Laser to either a switched or a timer-controlled socket outlet.



Do not use the computer system close to potential electromagnetic disturbance fields such as loudspeakers or base transceiver stations for mobile telephones.



If you connect the SpeedMarking-Laser to the power supply via an extension cable, ensure that the total nominal current of all of the devices connected to the extension cable does not exceed the capacity for that extension cable. In addition, you should ensure that the total nominal current of all the devices plugged into the wall-mounted socket outlet does not exceed the ampere rating for that socket outlet.



Do not carry out repairs to the device yourself.



- Never use damaged or worn out power cables.
- Connect the device to the mains only with cable described in this guide.
- Avoid the usage of multiple cables.
- Connect the network cable directly (never via an extension cable) to the power socket.
- Keep the mains cable undamaged and keep it in its original state. Do not place any heavy objects on it. Do not pull at it with force and do not bend it more than necessary. A disregard of these instructions can lead to electrocution or fire.
- Place the device close to an accessible power socket in order to be able to pull the mains plug in case of an emergency.
- Never connect or disconnect the mains plug to the power socket with wet hands. There is a risk of electrocution.



Disconnect the SpeedMarking-Laser and contact a qualified service engineer if any of the following occurs:

- The power cord or plug are worn or damaged.
- A fluid has penetrated into the SpeedMarking-Laser.
- The SpeedMarking-Laser is allowed to fall or the enclosure is damaged.
- The SpeedMarking-Laser does not operate normally or the standard of performance varies noticeably.



Keep any moisture or dust off the device. Otherwise, there is the danger of fire or electrocution.



- Do not spill any fluids into the Speed-Marking-Laser.
- Place the device onto a solid, flat surface. Otherwise, it could fall down and lead to possible danger to personnel.
- For installation in limited space, make sure that there is sufficient ventilation for the device.
- Do not block or cover openings of the SpeedMarking-Laser.
- Do not insert any objects into these openings.



This device is not to be operated without supervision.



The internally-emitting radiation is kept inside the printer by the protective housing and the external cover. The laser beam cannot emit from the device during operation.



The printer cannot be used or maintained if the protective cover is taken off the laser or scanner unit. The reflective beam is invisible and can damage the eyes.

Warning signs (BGV A 8 (VBG 125) & DIN 4844)



WARNING

Mind your hands.

Do not reach inside.



WARNING

Hot surface.

Do not touch.

2. Printer installation

This chapter is for the setup and installation of the new SpeedMarking-Laser.

Follow after unpacking the printer the listed steps in the checklist in its exact order. Each step is described in detail with easily understandable specifications.

2.1 Printer components

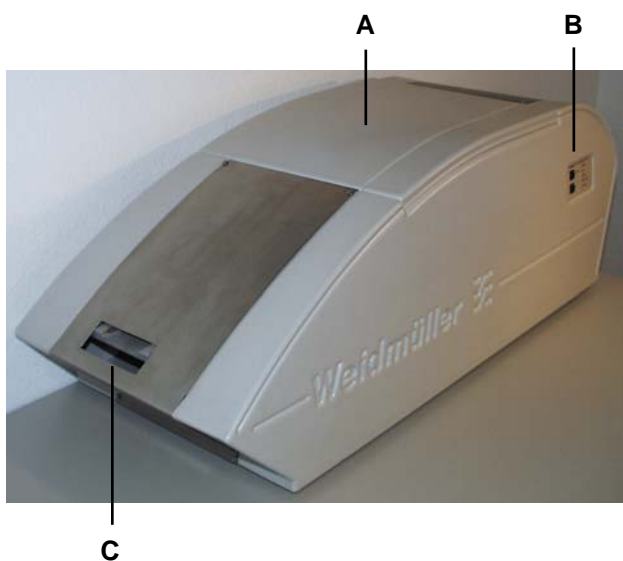


Figure 1 Front side

A Cover

B Operating panel

C Output

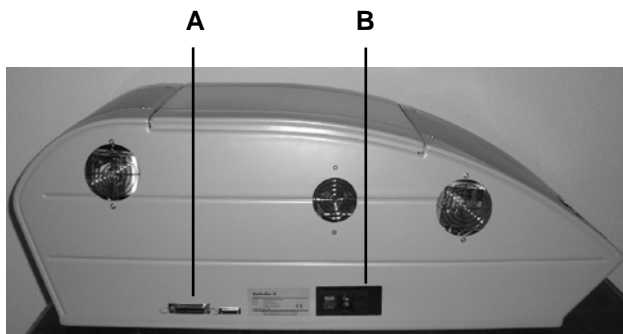


Figure 2 Rear side

A Parallel interface

B On/Off switch and mains connection

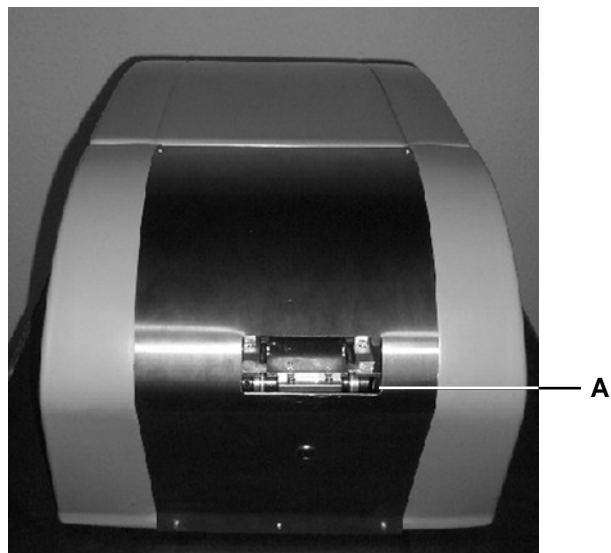


Figure 3 Rear side

A Input

2.2 Setting up the printer

- Place the device onto a solid, flat surface.
- Provide sufficient ventilation.
- The ambient conditions should be stable, e.g. the temperature and humidity fluctuations should be limited (Temperature: 20 °C – 35 °C; Humidity: 55% – 75%).
- Avoid direct sunlight on the printer.
- The environment of the printer should be free of any chemicals.

The following dimensions show the space required for setting up the printer.

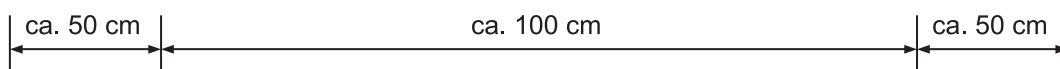


Figure 4 Space in front of and behind the printer

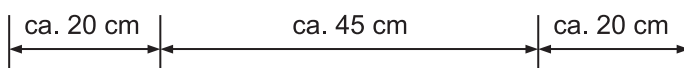
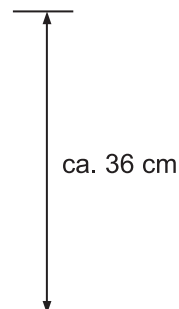


Figure 5 Space on both sides of the printer

Make sure that there is enough space in order:

- to open the upper cover
- to load material into the entry
- to empty the storage tray
- to be able to access the on/off switch
- to connect the mains and printer connection
- to use the operating panel

2.3 Unpacking the printer



Store all packaging material.

In case of repairs you should return the printer in its original packaging to avoid any possible damage in transit.

2.4 Insertion of toner cartridge



Figure 6 Opening the upper cover

- 1 Open the upper cover
- 2 Remove the transport retainer that is situated below the cover of the SpeedMarking-Laser.
- 3 Take the toner cartridge out of its packaging.



Figure 7 Removal of toner cartridge out of packaging

- 4 Remove the alignment rod for the roller.



Figure 8 Remove alignment rod for the roller



Caution

To avoid any damages, the toner cartridge should be exposed to the sunlight only for a few minutes.

- 5 Follow for steps 5-6 the instructions on the roller.



Figure 9 Roller

- 6 Do not position the toner cartridge upside down and do not shake it.

- 7 The transparent plastic-sealing strip is at the right side of the toner cartridge. Pull the strip (30 - 35 cm) completely out of the toner cartridge and dispose of it.



Avoid any contact with the black toner on the strip.

If any toner gets on your clothing, wipe it off by means of a dry cloth. Wash it subsequently with cold water.

- 8 Insert the toner cartridge into the printer. Observe that the arrow on the toner cartridge is pointing in the same direction as the arrow on the printer. Insert the alignment rod for the roller in its designated holding fixture. Close the upper cover.

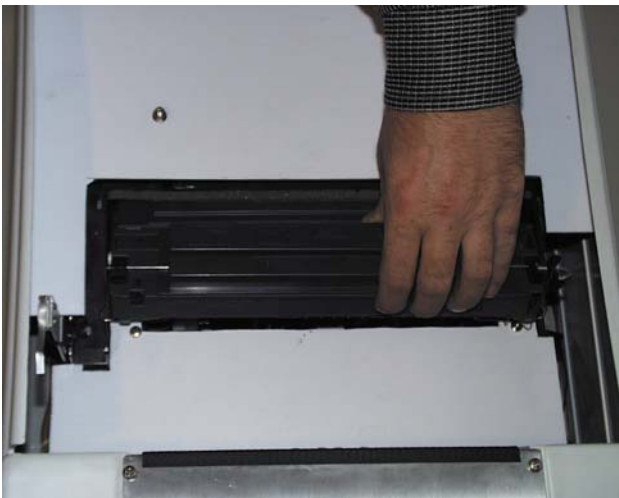


Figure 10 Insertion of toner cartridge

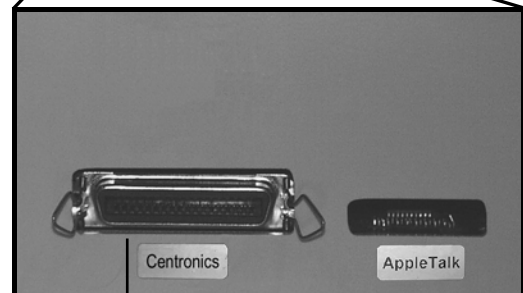


Never print without the cover of the SpeedMarking-Laser. The possible light exposure of the toner results in strong soiling of the device. The MultiCard strips will be printed completely black.

2.5 Connection of printer cable

The SpeedMarking-Laser possesses a parallel connection. Use this connection, if

- a connection should be established to a computer or laptop.
- your parallel cable has a standard length (up to 3 m).



A

Figure 11 Connection

A Parallel connection for the printer cable



The printer cable is included in the range of supply.

2.6 Connection of mains cable



Figure 12 Connection of mains cable



WARNING

Make sure that the power is not switched on.

- 1 Switch off the printer by pressing the On/Off button on the rear side.
- 2 Insert the mains cable firmly into the printer.
- 3 Connect one end of the mains cable to an earthed multiple socket. Make sure that the mains connection is sufficiently secured.



You can find more information in chapter 8 "Printer specifications".

- 4 Switch on the printer.

2.7 Installation of printer driver



Before printing, you should install the printer software.

Before you can use the printer with its software applications, you have to install the printer driver.

Windows printer system

Install one of these printer drivers, if the operating system on your computer is Windows NT4, Windows 95/98, Windows ME, Win 2000/XP.

The SpeedMarking-Laser is compatible to the following printer types:

- HP III
- HP LaserJet 6P
- HP LaserJet 6P/6MP (recommended)

Install from the delivered CD the printer driver HP LaserJet 6P/6MP-Standard

- 1 Place the CD into your CD-ROM drive. The CD starts automatically.
- 2 In the following menu, choose "printer driver" → "SMARK" → and your installed operating system.
- 3 If the CD does not start automatically, choose from the CD the file "setup.exe"

or

the following path:

(CD-ROM:\ D:\Driver\SMARK\English\[Choose the corresponding operating system]).

Installation of the Windows printer drivers

For Windows 2000/XP

- 1 Save the printer driver locally on the hard disk.
- 2 Add a new printer.

Windows 2000:

- 1 "Start" → "Settings" → "Printer" → "New printer".
- 2 Follow the installation assistant of the printer.
- 3 Select "Local printer" → "Use existing connection" (LPT1:).
- 4 Press the button "data carrier" and choose by pressing "search" the file "hp6pmp.inf" from the previous locally-stored driver files.
- 5 Choose the printer HP LaserJet 6P/6MP-Standard and finish the installation.

Windows XP:

- 1 „Start“ → "Settings" → "Printer & Fax machine" → "Add printer".
- 2 Follow the installation assistant of the printer.
- 3 Select "Local printer" → "Use existing connection" (LPT1:).
- 4 Press the button "data carrier" and choose by pressing "search" the file "hp6pmp.inf" from the previous locally-stored driver files.
- 5 Choose the printer HP LaserJet 6P/6MP-Standard and finish the installation.

For Windows ME

- 1 Follow the installation assistant of the printer.
- 2 Select "Local printer" (LPT1:).
- 3 Press the button "disk" and choose by pressing "search" the file "OEM95.inf" from the previous locally-stored driver files.
- 4 Choose the printer HP LaserJet 6P/6MP-Standard and finish the installation.

For Windows 95/98

The installation program for the printer driver starts automatically from the CD.

- 1 Follow the instructions of the program and install the printer driver locally on the hard disk.

For Windows NT 4

- 1 Follow the installation assistant of the printer.
- 2 Select "Local printer" (LPT1:).
- 3 Press the button "search" and choose by pressing "search" the file "hp6pmp.inf" from the previous locally-stored driver files.
- 4 Choose the printer HP LaserJet 6P/6MP-Standard and finish the installation.

3. Basic information of the printer

3.1 Printer functions

Technical data

Application:	Printing of the product portfolio MultiCard
Speed:	Maximum 3-4 cards per minute
Operating time:	Approx. 2-3 hours per day
Printing quality:	600 x 600 points dpi for texts and graphics
Feed:	Manual loading
Conditioning:	Heat radiator with approx. 1200 Watt
Fusing:	Heat radiator with approx. 1200 Watt
Interface:	Centronics parallel (others optionally possible)
Connection:	AC 230 V / 16A
Operating conditions:	Office conditions
Ambient temperature:	20 °C – 35° C
Humidity:	55% – 75%
Dimensions (W x L x H):	1000 x 430 x 380 mm

Table 1 Technical data

The SpeedMarking-Laser offers the user the following:

- Saving of time: 3 - 4 MultiCards per minute
- Easy to use
- High marking quality
- Markers immediately ready for use
- Works fast, independent of the amount of data
- Extreme flexibility through fast and demand-oriented production
- Printing of the product portfolio MultiCard



You can find more information in chapter 4.1 "Printing of adhesive backing markers".

- Reduced storage costs because only neutral markers are needed
- Suitable for graphics

3.2 Operating panel

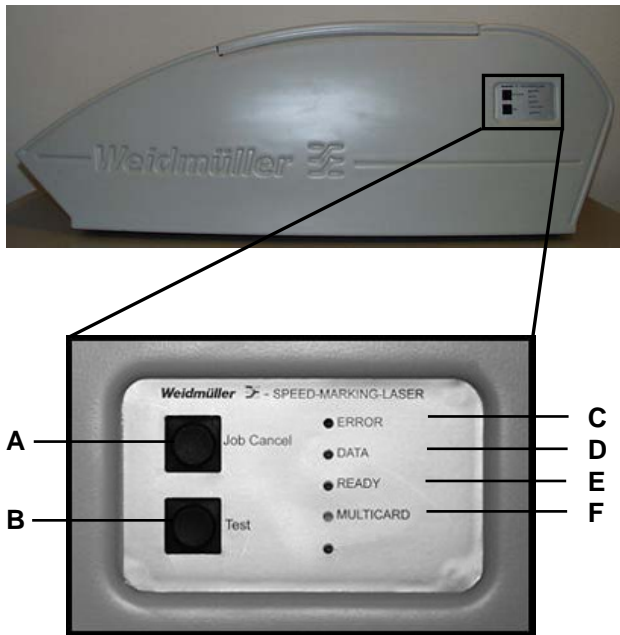


Figure 13 Operating panel

A Button Job Cancel

B Button Test

C LED Error (red)

D LED Data (green)

E LED Ready (green)

F LED MultiCard (yellow)

3.3 Operating panel buttons

The printer possesses the buttons: **Job Cancel** (A) and **Test** (B).

Job Cancel

Press the button **Job Cancel** to abort an ongoing printing job. During deletion of the printer storage, the LEDs on the operating panel will light up one after the other. The LEDs will then switch into the ready mode. This can take some time depending on the size of the printing job.



If the button **Job Cancel** has been pressed by mistake, then the job has to be printed again.

If the button **Job Cancel** is pressed during no-load operation, the upper LEDs of the operating panel will light one after the other.

Test

- Press the button **Test** to restart the printing after the printer has been stopped or data is still stored in the printer storage (the Data LED and Ready LED light up).
- Press the button **Test** in order to delete error messages of the printer (Error LED lights up).

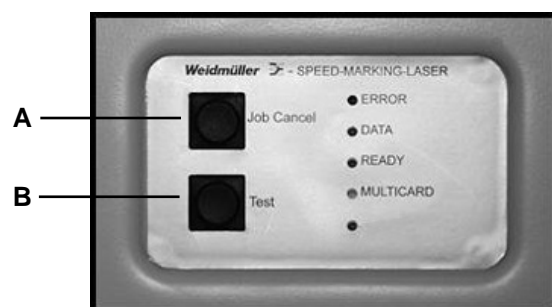


Figure 14 Operating panel buttons

A Cancel job

B Test

3.4 LED displays

The LED displays indicate status and error messages. The LEDs can be in the following mode.


Off


On


Flashing

Messages of the upper status field

The following status messages of the operating panel indicate different requirements of the printer for the preparation of a printing job or during printing. If the error LED lights up, then there is an error at the printer.



You can find more about error messages in chapter 6 "Troubleshooting".










Errors	Data	Ready	MultiCard	Description
				The printer is ready for printing.
				The printer is receiving or processing data.
				Data that has not been printed is in the printer storage. Press the button Test in order the print the data or the button Cancel job to delete a job.
				If all LEDs light up one after the other, the printer is performing a warming-up, processes a self-test or cancels a printing job.

Table 2 LED displays

3.5 Switch for printing SF markers



Figure 15 SF switch

1 Open the cover of the SpeedMarking-Laser.

The switch for printing SF markers is situated here. If SF marker should be printed, the switch must be set to "SF 1-6".



If long or high markers are used (e.g. SF 5/21) and the print-out in the last row is not printed properly, then set the switch also to "SF 1-6".

3.6 Printer drivers

The SpeedMarking-Laser is compatible to the following printer types:

- HP III
- HP LaserJet 6P
- HP LaserJet 6P/6MP (recommended)



More information for installation of the printer driver is available in chapter 2.7 "Installation of printer driver".

3.7 Accessories and ordering information

Optional	Description and utilization	Part numbers
Special-toner cartridge	Spare cartridge	1770070000
Cable and interface accessories	Connection of printer	
Software CD	CD including drivers and printing software	1954040000
Loader	Automatic feeding of MultiCard	1782880000

Table 3 Accessories and ordering information

4. Printing jobs

This chapter is about printing options and printing jobs that have to be performed regularly.

4.1 Printing of adhesive backing markers



The Weidmüller adhesive-backing device markers ESG, SM and CC are recognizable by their brown paper material. Their suitability for printing in the SpeedMarking-Laser is only **limited**.



Please make sure that each used type of marker has been tested and approved by the user, by checking for any issues with the adhesive part of the marker. In case adhesive may leak from the marker, do not use it.



CAUTION

Observe the following for the automatic labelling of the adhesive-backing markers.

The impairment of the interaction area as well as the soiling of the roller can lead to blotchy printing of the markers and to damaging the device.



It is necessary to clean the Corona unit if printing 5 MultiCards or more.

- The adhesive backing of the markers leave adhesive remnants on the Corona unit of the printer.
- A roller contaminated by glue residues of the special-toner cartridge cannot be cleaned and must therefore be changed.



The cleaning of the Corona unit is described under "Cleaning of the SpeedMarking-Laser" in chapter 5.4 "Printer maintenance".

4.2 Printing preparation

Selection of media

Only markers of the Weidmüller MultiCard line with a height of 9 mm or less can be printed with the SpeedMarking-Laser.



You can find more information in chapter 4.1 "Printing of adhesive backing markers".



For usage of SF MultiCard strips, please observe the chapter 3.5 "Switch for printing SF markers".



CAUTION

It is only allowed to feed entire MultiCard strips into the printer.

Damaged or incomplete MultiCard strips can damage the device.

As a rule, soiled or smudgy MultiCard strips should not be used.

Each MultiCard can only be used once.

4.3 Printing jobs

4.3.1 Stopping a printing job

A printing job can be stopped by the software application, printer queue or by pressing the button **Job Cancel**.

If the printer has not started a printing job, try to stop it first using the software application.

If the printing job is in the printing queue or in the printing spooler, try to delete the printing job there.

If the printing job is printing, press the button **Job Cancel**. The printer finishes the MultiCard strips that are already in the printer storage and deletes the rest of the printing job.

If the status LEDs light up one after the other after the printing job has been cancelled, the computer sends the printing job nevertheless to the printer. Delete the printing job from the printer queue or wait until the printer has finished sending the data.

The printer switches into the ready mode (ready LED lights up).

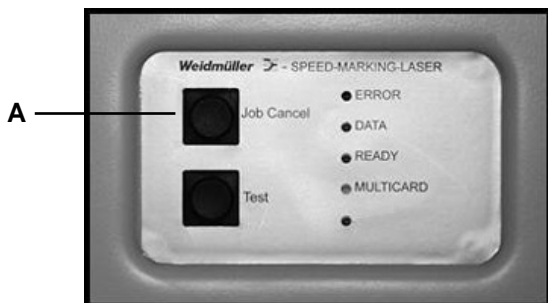


Figure 16 Job Cancel button

A Job Cancel



Tips for cancelling a job

If you press the button **Job Cancel**, only the current printing job in the printer will be cancelled.

If multiple printing jobs are in the printer storage, the button **Job Cancel** has to be pressed for each printing job.

4.3.2 Printing with manual feeding

The SpeedMarking-Laser is equipped with a manual feed. This is done as follows.

- 1 The MultiCard markers will be fed with the project marking surface into the entry (see also Figure 17 "Manual feeding").
- 2 The marker is inserted until it firmly touches the stop at the end.



Figure 17 Manual feeding



When a marker has been drawn in, the next MultiCard can be inserted.

5. Printer tips and maintenance

This chapter includes suggestions how high quality and low consumption can be reached at the same time. Moreover, special maintenance jobs for toner cartridge and printer are described here.

5.1 Improvement of printing

In this chapter, the described settings concerning the printing quality can be modified via the software program of the Windows printer drivers.

The printing must always be done with the best quality and the highest resolution.



You can find more general information concerning these settings and adjustments on the help screens of the software.

5.2 Extend the lifespan of the special-toner cartridge

If light areas appear on the printout, then toner is missing. You can improve the printing quality temporarily by re-distributing the toner in the cartridge.

- 1 Finish the current print job before changing the toner cartridge.
- 2 Open the cover of the SpeedMarking-Laser.
- 3 Take the toner cartridge out of the SpeedMarking-Laser.
- 4 Sway (**never shake**) the toner cartridge back and forth multiple times in order to distribute the toner again. Do not position the toner cartridge upside down.
- 5 Insert the toner cartridge again into the SpeedMarking-Laser.
- 6 Close the cover.



If the printout remains pale, change the toner cartridge.



If any toner gets on your clothing, wipe it off by means of a dry cloth. Wash it subsequently with cold water.

5.3 Maintenance of special-toner cartridge

5.3.1 Lifespan of special-toner cartridges

The lifespan of a special-toner cartridge depends on the amount of toner being used for printing jobs. If mainly text is printed, the special-toner cartridge lasts for 1500 MultiCard strips with a coverage of 5%.

It is taken for granted that "Highest quality" and a printing density of "3" (standard setting) is set.

5.3.2 Storage of special-toner cartridge

Take the special-toner cartridge out of the packaging just before installation. The period of storage of an unopened special-toner cartridge is approximately 2.5 years. In contrast, the period of storage of an opened special-toner cartridge is 6 months.



CAUTION

To avoid any damages, the toner cartridge should only be exposed to the sunlight for a few minutes.

5.4 Printer maintenance

Cleaning of the SpeedMarking-Laser

To maintain high printing quality, clean the Speed-Marking-Laser each time after changing the special toner cartridge. The cleaning also has to be done if there are problems with the printing quality. In this regard, observe the following instructions:

Keep the SpeedMarking-Laser free of dust or any dirt particles.

Clean the outside of the housing with a slightly moist cloth.



CAUTION

Do not use any ammonia-containing cleaning agents on or in the vicinity of the SpeedMarking-Laser.

- Over time, small dust particles and toner residues accumulate in the Speed-Marking-Laser. This can lead to white strips on the printout. After cleaning, you will get a normal printing result.



WARNING

Switch off the SpeedMarking-Laser and pull the mains cable before you start cleaning the SpeedMarking-Laser.

- 1 Open the cover of the SpeedMarking-Laser.
- 2 Take the toner cartridge out of the SpeedMarking-Laser.



CAUTION

To avoid any damages, the toner cartridge should be exposed to the sunlight only for a few minutes.

- 3 With a dry and lint-free cloth, remove any dust, dirt, toner and possible adhesive elements out of the printing area.

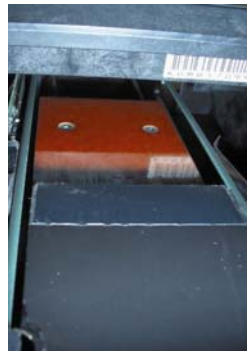


Figure 18 Print area

- 4 Insert the toner cartridge again into the Speed-Marking-Laser.
- 5 Insert the alignment rod for the roller in its designated holding fixture.
- 6 Close the cover, insert the mains cable and switch the printer on again.

6. Troubleshooting

This chapter is about troubleshooting if the following problems with the printer occur:

6.1 Fuses

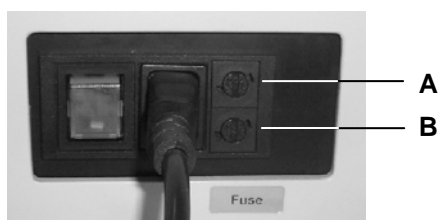


Figure 19 Fuses

A Upper fuse:

5 x 20 mm 10 A / Slow → Control printer

B Lower fuse:

5 x 20 mm 10 A / Slow → Power circuit of the pre-heating and of the fixation unit

The lower fuse is for the power circuit of the pre-heating and for the fixation unit. If this fuse fails, neither of the heaters will work.

The upper fuse is for the control of the printer. If the control is not working, the printer cannot be switched on.

This device is subject to special conditions regarding its connection to the mains supply (EU Member States).

The supply impedance at the point of connection to the public electricity supply must not exceed $(0.14 + i 0.09)$ Ohm.

In all other cases, consult the power supply company before connecting the device to the public supply system.

6.2 Overheating shutoff

During long operation, the device may be shutoff to save it from overheating.

The error LED is lit. If pressing the button **Test** does not lead to an intake of a MultiCard, leave the device on for 10 - 15 minutes for cooling down and press the button **Test** again. The stored printing jobs will be processed.

6.3 Remedy for jamming

Occasionally, jamming of MultiCards can occur during a printout.

Jamming can occur in the following areas:

- Input area
- Toner cartridge area
- Output area

Normally, jamming occurs in the following cases:

- A MultiCard strip has not been loaded or transported properly.
- The cover was opened during printing.
- In the input area was a deficient or an incomplete MultiCard strip.



Remove the accumulated MultiCard and follow the instructions on the following pages. If it is not clear where the problem was, look at first in the area of the toner cartridge.

6.3.1 Congestion in the input area

- 1 Turn the SpeedMarking-Laser off.
- 2 Open the cover and remove the toner cartridge.



CAUTION

To avoid any damages, the toner cartridge should be exposed to the sunlight only for a few minutes.

- 3 Remove the accumulated material from the input area. To do this you may have to move the green transport belt. Care must be taken to avoid moving the belt out of its guides.
- 4 Check whether the input area is completely cleaned.
- 5 Insert the toner cartridge again.
- 6 Insert the alignment rod for the roller in its designated holding fixture.
- 7 Close the cover.
- 8 Turn the SpeedMarking-Laser on again.

The SpeedMarking-Laser should now be operational again.



If the error LED does not go out, there is the possibility of accumulated material in the SpeedMarking-Laser.

6.3.2 Congestion in toner area

- 1 Turn off the SpeedMarking-Laser.
- 2 Open the cover and remove the toner cartridge.



CAUTION

To avoid any damages, the toner cartridge should only be exposed to the sunlight for a few minutes.

- 3 Remove the accumulated material from the input area. To do this you may have to move the green transport belt. Care must be taken to avoid moving the belt out of its guides.
- 4 Check whether the toner area is completely cleaned.
- 5 Check whether the Corona unit runs smoothly.
- 6 Insert the toner cartridge again.
- 7 Insert the alignment rod for the roller in its designated holding fixture.
- 8 Close the cover.
- 9 Turn the SpeedMarking-Laser on again.

The SpeedMarking-Laser should now be operational again.



If the error LED does not go out, there is the possibility of accumulated material in the SpeedMarking-Laser.

6.3.3 Congestion in the output area

- 1 Turn off the SpeedMarking-Laser.
- 2 Open the cover and remove the toner cartridge.



CAUTION

To avoid any damages, the toner cartridge should be exposed to the sunlight only for a few minutes.

- 3 Remove the accumulated material from the input area. To do this you may have to move the green transport belt. Care must be taken to avoid moving the belt out of its guides.
- 4 Check whether the output area is completely cleaned.
- 5 Check whether the Corona unit runs smoothly.
- 6 Insert the toner cartridge again.
- 7 Insert the alignment rod for the roller in its designated holding fixture.
- 8 Close the cover.
- 9 Turn the SpeedMarking-Laser on again.

The SpeedMarking-Laser should now be operational again.



If the error LED does not go out, there is the possibility of accumulated material in the SpeedMarking-Laser.

6.4 Problems with the printing quality

6.4.1 Checklist for printing quality

General problems with the printing quality can be resolved by observing the following checklist.

- 1 Re-distribute the toner inside the toner cartridge. Sway (**never shake**) the toner cartridge back and forth multiple times. Do not position the toner cartridge upside down.
- 2 Clean the inner part of the SpeedMarking-Laser. Remove with a dry and lint-free cloth any dust, dirt, toner and possible adhesive elements out of the printing area.
- 3 Check the condition of the markers.



CAUTION

Damaged or incomplete MultiCard strips can damage the device.



As a rule, soiled or smudgy MultiCard strips should not be used.

Each MultiCard can only be used once.

- 4 Change the special toner and check the printing quality again.
- 5 Check the storage conditions of the printing media (Temperature: 20 °C – 35 °C; Humidity: 55% – 75%).

An insufficient saturation of the material can lead to an unsatisfactory printout, pale print and missing sharp contours.



The storage conditions of the printing media are described under "Storage of printing media" in chapter 8.2.2 "Specification for the printing media".

6.5 Checklist for troubleshooting

If the SpeedMarking-Laser is not printing, follow the checklist in its specified order.

Make sure that the ready LED lights up.

If no LED lights up:

- Check the connection of the mains cable.
- Check the on/off switch.
- Check the power source.
- Check the fuses.



You can find more information in chapter 6.1 "Fuses".

6.5.1 Troubleshooting for error messages

If the error LED lights up, there is an error at the SpeedMarking-Laser.

Find the corresponding LED display and follow the solution suggestions to remedy the error.

Repairable errors

- The upper cover is open. Close the upper cover.
- The toner cartridge is missing or has not been installed properly. Check the toner cartridge and place it carefully into its right position.
- Accumulated material is in the SpeedMarking-Laser.



Refer chapter 6.3 "Remedy for".

Data error

If the error LED and the data LED light up simultaneously, a data error has occurred at the SpeedMarking-Laser.

- To find out the reason for the data error, press the buttons **Test** and **Job Cancel** and keep these pressed. A second LED display indicates the particular error.

EA error

The connection cable between the printer and computer is possibly loose or of low quality.

- Make sure that the cable is fixed strongly and that you use a high-quality cable.

Errors, when the printing can be continued

A temporary error occurred during printing.

- Press the key **Test**. The page will automatically be printed again.

Temporary error

The printer has a temporary error.

- Turn the SpeedMarking-Laser off and on again. If the error occurs again, contact the customer support. Phone number +49 (0) 52 31 14 12 52.

6.5.2 General troubleshooting

Empty, deficient or incomplete pages and disruption of the printing operation

Pages have been printed but are blank.

- The sealing band of the special-toner cartridge has not possibly been removed.

Pages have been printed, but the printing is deficient, pages have only been partially printed or the printing is overlapping.

- Make sure that the software application uses the right printer driver.
- The data file sent to the printer is incorrect. Try to print another file in order to see whether this one is printed correctly.
- Exchange the printer cable with one that you know is functioning. This tells you whether the printer cable is faulty.

Font problems

The printing job contains the wrong font types or the printing job has been formatted wrongly.

- Make sure that the software application uses the right printer driver.
- The printer does not possess this font type. The font type has to be downloaded via the software application.
- It is possible that font is not available on the printer and has been replaced by the software application with another font.



You can find information about the selection of font types in the User's Manual.

7. Guarantees

This chapter offers information about guarantees that are valid for the SpeedMarking-Laser and the special-toner cartridge.

7.1 Limited guarantee

Weidmüller offers a six month guarantee on the SpeedMarking-Laser after purchase by the user.

During the guarantee period, Weidmüller is committed to repair the damaged SpeedMarking-Laser as they see fit.

If the SpeedMarking-Laser should be repaired by Weidmüller, make sure that the SpeedMarking-Laser is not further damaged by the transport packaging or the transport.



If possible, use the original packaging material.

7.2 Guarantee exclusions

Excluded from the guarantee for the SpeedMarking-Laser are errors or damages that can be traced to the following causes:

- Inappropriate or inadequate maintenance by the customer.
- Software or interfaces provided by the customer.
- Unauthorized modification or misuse.
- Operation outside the described environmental conditions.
- Usage of unauthorized printing media.
- Exceeding the indicated throughput.
- Operation of the SpeedMarking-Laser via a mechanical relay without an adequate overvoltage fuse.
- Inappropriate setup and maintenance of the installation location.
- Usage of special-toner cartridges that are not distributed by Weidmüller.

Usage of a toner cartridge that is not distributed by Weidmüller has no consequences on the guarantee. If it turns out that the equipment failure, printing quality, resistance of marker labelling or damage of the SpeedMarking-Laser is the consequence of usage of a toner cartridge not distributed by Weidmüller, then the repair is not covered by the guarantee.

If the throughput of the SpeedMarking-Laser during operation is exceeded (when more than 600 MultiCards per day or 12000 MultiCards per month are printed), this is a misuse of the SpeedMarking-Laser and the labour and material costs will be charged for all ensuing repairs.



CAUTION

For usage of a mechanical relay, ensure that it is equipped with an overvoltage fuse. The usage of unprotected mechanical relays can lead to damages to the SpeedMarking-Laser.

The guarantee period starts on the day of delivery or the day of installation by Weidmüller.



Except for the above mentioned guarantee, Weidmüller provides no other written, verbal, contractual or legal guarantees.

7.3 Restriction of liability



Weidmüller is not liable for indirect damages or compensation for expenditures while fulfilling the contract including compensation demands for lost earnings or lost savings.

7.4 Customer support during and after the guarantee period

If the SpeedMarking-Laser fails during the guarantee period, please contact the customer support.

If you send the device to the customer support, pack it according to the packaging instructions in this chapter. We recommend insuring the package for the transport.



Transport damages caused by insufficient packaging are at the expense of the customer.

If possible, use the original packaging material.

Please observe the packaging instructions.

7.5 Packaging instructions

- 1 Remove the special-toner cartridge and put it into the original carton of the SpeedMarking-Laser. If possible, use the original carton and the packaging material.
- 2 If possible, add printing examples and MultiCard strips of the used material.
- 3 Attach a copy of the completed info formula (next page) for the customer support.

If you have disposed of the original packaging material of the SpeedMarking-Laser, contact a packaging or postal service to pack the SpeedMarking-Laser again.



Transport damages caused by insufficient packaging are at the expense of the customer.

If possible, use the original packaging material.

Please observe the packaging instructions.

7.6 Guarantee for toner

- 1 Pack the defect special-toner cartridge into the original carton.
- 2 Make sure that the toner packaging is sealed. Use additional packaging parts in order to stabilize the toner cartridge.

Attach the following information to the packet:

- Your name and your address
- If possible, printing examples of the deficient special-toner cartridge
- Attach a copy of the completed info formula (next page) for the customer support.



The info sheet "Form for customer support" is at the end of this User's manual.

8. Printer specifications

8.1 Environmental conditions

8.1.1 Dimensions

Height	380 mm
Width	430 mm
Length	1000 mm
Weight (including toner cartridge)	35 kg

8.1.2 Electrical ratings:

Mains voltage:	110 V/AC	230 V/AC
Power input	1300 W	1300 W
Recommended minimum current capacitance	16 A	16 A
Frequency	50 – 60 Hz	50 – 60 Hz

8.1.3 Environmental conditions

	Environmental conditions during operation
Temperature	20 °C to 35 °C
Relative humidity	55% to 75%

8.2 Consumables

8.2.1 Toner

Article No.:	1760070000
Durability:	2.5 years (original packaging, at 10 °C – 40 °C)
Capacity:	1500 cards with 5% coverage

8.2.2 Specification for the printing media

You can print with the SpeedMarking-Laser entire cards of the Weidmüller MultiCard program, if you follow the specifications and guidelines of this manual. Printing media that do not fulfil these requirements can damage the printer and it can result in forfeiting the guarantee.

Storage of printing media

For reaching optimal printing results, we recommend an initial storage phase (of at least 24 hours before use) under office conditions (Temperature: 20 °C – 35 °C; Humidity: 55% – 75%).

Info - Form for customer support			
Person who sends back the device:		Date:	
Contact person:		Telephone number:	
		()	
Additional contact persons:		Telephone number:	
		()	
Address of shipper:		Special shipment instructions:	
Which product will be sent?	Model number:	Serial number:	
Add relevant printouts to the return consignment of the product.			
Accessories not relevant for the repair, e.g. manuals, shouldn't be sent.			
What has to be done?			
1. Describe the failure. (What has been the failure? What have you been doing during occurrence of the failure? Could the failure happen again? etc.)			
2. Additional comments:			
How is being paid for repairs?			
Covered under guarantee		Date of purchase/Date of receipt: _____	
By order number:			
<p>Apart from the guarantee service, a repair request must be supplemented by an order number and/or an authorized signature. If the standard repair prices are not correct, a minimum order quantity is necessary. The standard repair prices can be requested at the service station.</p>			
Authorized signature: _____		Telephone number:	

The invoice should be sent to the following address:		Special invoice directive:	

www.weidmueller.com

Weidmüller Interface GmbH & Co. KG
Postfach 3030
32720 Detmold
Klingenbergstraße 16
32758 Detmold
Phone +49 (0) 5231 14-0
Fax +49 (0) 5231 14-2083
E-Mail info@weidmuller.com
Internet www.weidmueller.com

Order number:
5658600000/00/05.07